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REVIEWS OF ATTITUDE
INVENTORIES IN PRINT I

DEPARTMENT OF POLICY RESEARCH, PLANNING AND PROGRAMMING
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH & TRAINING
SRI AUROBINDO MARG, NEW DELHI-110016.

1984-85

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INTRODUCTION

Educational and Psychological Tests are an important tool in the hands of researchers, school psychologists, clinical psychologists, counsellors, teachers and administrators, who select, administer and interpret them and make decisions based on test scores. However, in order to choose the right test to meet their needs, these test users need scientifically prepared reviews of the available tests.

This bulletin presents twenty five reviews on Fourteen published Indian Tests in the area of Attitude & Interest. These reviews have been written by persons of outstanding ability representing different view points which will assist test users to make more discriminating selections of the standard tests which will best meet their needs.

Besides the test users, the test reviews may exercise a quality control on development of psychological tests in the country. The reviews may motivate the test-developers and publishers to place fewer and better tests on the market. The quality of research may also be improved.

(1) 1. Name of Test

SUPERSTITION SCALE
(NT - 283)

2. (a) Language of test : Hindi

(b) Language of manual : Hindi & English

3. Format of Test, such as reusable test booklet, separate answer-sheets etc. : --

4. Time for administration : --

5. Number of forms available : No other form is available

6. Date of publication and of revision (if any) : --

7. Price : Rs. 11/-

8. Author's name & position : Shri L.N. Dubey,
Deptt. of Psychology,
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Psychology and Guidance,
Jabalpur.

&
Shri B.M. Dixit
Deptt. of Psy.,
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Agra.

9. Publisher : National Psychological
Corpn., Hotel Tharamlok,
Raja Mandi,
Agra - 282002.

- 2 -

As a first step of understanding human behaviour, test developers always have a unique and special responsibility because, once developed, the tests are often used for building new hypotheses and testing already existing hypotheses and even theories relating to human behaviour. If at this very first stage, if developing an instrument goes wrong the subsequent theory building could be wastage of time, manpower and resources. Such a psychological instrument may misguide the behavioural scientists to formulate theories which may not exist and conclude things which may have devastating implications for individuals who are assessed by these scales and on the development of psychology as a science in general. On going through the superstition scale one cannot help feeling that the authors of this scale do not seem to release their responsibility. While developing any test, it is quite essential to describe the construct which is to be measured. This seems to be far from satisfactory. The description of the construct of superstition does not have any professional touch. Nor, the assumptions such as "uneducated and people with low intelligence are more superstitious" have been stated on the basis

of any scientific findings. One would feel alarmed as the authors have ignored the minimum steps which are essential for test construction. First of all, nothing has been said about the areas of superstition and corresponding item writings. Besides, most of the 40 items which have been included in the test appear nondiscriminating or at least redundant. An item analysis of a large number of items could have helped better for the selection of items for the final test. The test has been administered on an impressive sample of 1855 subjects and the purpose of this administration has never been stated clearly. The authors, however, claim that this was sample used for standardization. One finds a number of tables (Tables 1 through 5) devoted entirely to classify subjects into various groups on a number of dimension (i.e. home setting, SES, education, intelligence, age, personality characteristics) none of which has been used for norm establishment. Table 7 gives the mean and SD on this scale probably for the sample of 1855 subjects. With regard to the reliability, it is not clear how Spearman-Brown correction was applied to the superstition scale which is not a power test, of the information of the method of splitting of the scale is not given. A correlation of superstition scale with

the Radical-Conservative Attitude Scale could hardly speak about the former's validity without a detailed description of the latter.

Preparation of scoring key is often most crucial job in a test development programme. There exist various approaches to this key procedure. The authors prefer to keep quiet on this most important aspect of their test development programme and simply provide a scoring key in Table 7 without mentioning how it was developed. Finally, categorisation of people into five groups on superstition dimension on the basis of their scores appears unnecessary as no attempt seems to have been made to describe the distribution of the scores.

In general, it appears that the authors of the superstition scale have violated all standards of test development. The scale could never be recommended for use unless the authors made a thorough and overall revision following the steps of test development.

Reviewed by :

Dr. B.N. Pohan,
Deptt. of Psychology
Babal University,
Babalnagar - 781004.

- (2) 1. Name of Test : SUPERSTITION SCALE
(NTL - 283)
2. (a) Language of test : Hindi
(b) Language of manual : Hindi & English
(Mixed)
3. Format of Test, such as ransable test, booklet separate answer-sheets etc. : Consumable
4. Time for administration : -
5. Number of forms available : No other form is available
6. Date of publication : -
7. Price : Rs.11/- per specimen set
8. Author's name and position : Shri I.N. Baboy
Deptt. of Psychology
College of Education
of Psychology & Guidance
Jabalpur.
&
Shri B.M. Dixit,
Deptt. of Psychology
Agra College,
Agra.
9. Publisher : National Psychological
Corporation,
4/230, Kachori Ghat,
Agra - 4.
10. Applicability : The aim of the scale is to discriminate the persons having different degrees of superstitions.

The Superstition Scale was developed by Dubey and Dixit with a view to discriminating persons having different degrees of superstition. In the construction and standardization of any test, it is essential that the construct to be measured is described adequately and stated in clear and explicit terms. The manual, however, does not cover this information. The description does not seem to have any scientific basis for the same. Obviously, this is a serious shortcoming of this scale, which renders its use rather doubtful.

The scale consists of 40 statements, against each of which 3 alternative answers are written and the subject is required to choose one answer. A score of 3 is given for showing higher degree of superstition, 2 for lower degree and 1 for zero degree of superstition. No rationale for the inclusion of the items in the scale has been mentioned. Details on the selection process would be desirable. In fact, the authors should have constructed a large number of items and made a selection after employing a suitable technique of item analysis.

As stated by the authors, the scale has been standardized over a representative sample of 1866 people drawn from rural and urban areas. Nothing has been stated as to how the representative character of the sample was ensured. The sampling procedure followed to standardize the scale seems to have been completely glossed over.

Although Tables 1 to 6 give elaborate description of the break-up of the sample in terms of place of residence, sex, age, socio-economic status, levels of education, levels of intelligence and introversion-extroversion dimension of personality, the authors have hardly made use of the same in the analysis and interpretation of data. Table 7 presents mean and SD for the total sample alone.

High reliability and validity coefficients for the test have been reported. Reliability information, however, in terms of stability over a period of time has been ignored. The validity has been established by correlating the scores on this scale with the scores on Radical-conservative attitude scale. In the absence of the details about the Radical-conservative attitude scale, it is hard to make any sense out of what the authors have stated. Even the content validity of the scale has not

been demonstrated.

No basis for the preparation of the scoring key has been indicated by the authors and the categorisation of scores presented in Table 8 gives the impression that the same has been done perhaps in a purely arbitrary manner.

In summary, it can be said that the authors have shown scant regard for the basic procedures involved in the development of a test. With its varied drawbacks pointed out above, this scale cannot be recommended for the use as stated by the authors.

Reviewed by :

Dr. A.K.P. Sinha,
Bttd. Chief Psychologist
Bajendra Nagar,
Road No. 3,
Patna - 800016.

- (3)
- | | | |
|--|---|---|
| 1. Name of Test | : | RAO'S SCHOOL ATTITUDE INVENTORY (NTL - 313) |
| 2. (a) Language of test | : | Hindi |
| (b) Language of manual | : | English |
| 3. Format of Test, such as reversible Test booklet separate answer sheets etc. | : | Consumable |
| 4. Time for administration | : | There is no time limit |
| 5. Number of forms available | : | No other form is available |
| 6. Date of publication and of revision (if any) | : | -- |
| 7. Price | : | Rs.12/- |
| 8. Author's name & position | : | Dr. D.Gopal Rao,
M.C.E.R.T.,
New Delhi. |
| 9. Publisher | : | Agra Psychological Research Cell,
Tiwari Kothi,
Balanganj,
Agra. |

This self-report measure of school Attitude with no time limit has been developed following Likert's technique of attitude scale construction. Out of an

initial pool of 80 items (both in Hindi & English) 57 items were retained after 'careful editing'. While the author claims that five areas of school life are tapped by these

statements, he does not specify the number of items encompassing these areas. Moreover, the basis of judgments of criterion relevance of the items is not provided. The preliminary tryout has been attempted on a 'representative' sample of 360 higher secondary pupils (grades 8 to 11) of Delhi city. The test manual is silent on the method of sampling from the population of higher secondary pupils. The items have been analyzed using extreme groups (high and low groups) to calculate the discriminative values, and 30 items have been selected for the final form of the scale with a suitable balance between negative and positive items. Only odd-even reliability coefficient has been reported. More evidence of internal consistency should have been provided for tests of this type. The validity data is totally inadequate. Obviously, additional information for the test is needed on criterion related validity. 'Norms' on this test are notable by their absence. Thus the interpretation of test scores is not possible. This calls for development of norms on clearly defined populations. The Manual (present one comprising only 5 pages) should have summarized competent research work reported elsewhere, either by the author of the test or by others. Since this test is likely to be used to compare groups, rather than individuals, standard errors of measurements of groups

means and related statistics should also have been presented. The test Manual does not state explicitly, the purpose and application for which this test is recommended. In sum, this test appears to have a very limited utility.

Reviewed by :

Prof. Sagar Sharma,
Prof. & Head,
Department of
Psychology & Dean
Faculty of Arts,
Summer Hills,
H.P. University,
Simla - 171005.

- (4) 1. Name of Test : RAO'S SCHOOL ATTITUDE INVENTORY (NTL -313)
2. (a) Language of test : Hindi
(b) Language of manual : English
3. Format of Test, such as reusable Test booklet separate answer sheet etc. : Consumable
4. Time for administration : There is no time limit
5. Number of forms available : No other form is available
6. Date of publication : --
7. Price : Rs. 15/-
8. Author's name & position : Dr. D. Gopal Rao
Reader,
N. C. T. R. T.
New Delhi.
9. Publisher : Agra Psychological
Research Cell,
Tiwari Kothi,
Balanganj,
Agra.

Rao's school attitude inventory comprises of 30 attitudinal statements and is a Likert type of scale, each item being followed by

a five point scale ranging from strongly agree to strongly disagree. The manual states that the instrument can be used

for diagnostic as well as used counselling purposes and/ to be a very useful tool in the hands of a teacher or a counsellor.

The initial pool of items consisted of eighty items collected from various sources like educationists, parents, and teachers etc.,. These items were carefully edited following the criteria suggested by Edwards (1957). This resulted in the retention of 57 of the original eighty statements, 32 being positive and 25 negative. The 57 statements represented the following 5 areas of school life, teachers, school, school programmes, social acceptance, and perceived parental attitudes towards school.

The preliminary try out of the items was carried out on 360 pupils of grades eight to eleven, drawn from 5 higher secondary schools from Delhi. Item analysis was carried out comparing the highest 27% with lowest 27% to arrive at the discriminatory power of each item. Those items which showed a significant difference (a critical ratio of not less than .05 level of significance) were retained. Thirty three such items were retained. These 33 items were subjected to scrutiny of a group of 12 experienced teachers resulting in a further elimination of 3 more items. The final form thus consisted of 30 ..

Reliability and validity :

The author reports a Split-half reliability coefficient of 0.81 after application of the S-B formula. It is not clear how many subjects were used to assess reliability. The author does not report any validity coefficient for the instrument. This difficult to appreciate the claim that the original procedure of item validation would be also treated as validation of the instrument. The validity of individual items on the basis of internal consistency cannot be equated with the validity of a tool as a whole in relation to the external criteria. The author further reports that the tool when administered to a group of students clearly differentiated between two groups of students judged by teachers as well adjusted and poorly adjusted. However, no quantitative data is presented in support of this claim.

Norms:

The manual does not present any data regarding standardization and consequently no norms are reported. It is perhaps true that a school adjustment inventory which is easy to administer, score, and interpret will be useful to the teacher, counsellor and perhaps for the research worker also.

Rao's school attitude inventory presumably is an

But the inventory suffers from many limitations and in its present form may not be adequate for the purpose. Some of these limitations are indicated. The author has not clearly spelt out the scope of the inventory. A very simplified procedure has been followed. Items were collected at random and item analysis was carried out and subsequently they were found to relate to five areas. The manual does not report the number of items falling under the different areas. Again, one does not understand the distinction made between "School" and "School Programmes". Similarly it is difficult to understand the inclusion of perceived parental Attitudes under school attitudes.

One also fails to understand why the items were subjected to expert judgement after item analysis and not before, as is usually done. The manual does not report details regarding the sample on which the reliability was established, leave alone the size. Details regarding the discriminatory values of the individual items are also not reported. The situation is equally unsatisfactory in regard to the validity of the tool as no validity

coefficient of any sort is reported. The instrument has not been standardized and thus, imposing serious limitations of its usefulness.

A surprising feature is that the items in the tool are in the form of questions. This is not the form in which items in an attitude inventory are usually framed. The fact that the items are in the form of questions is likely to render it difficult for the respondent to answer, using a five point scale. Finally, one also wonders whether Dr. Rao has developed an attitude inventory or an adjustment inventory. Perhaps this should be left to the imagination of the users on the whole. Here is an attempt to develop a tool in an area of importance but the procedure and the product appear to suffer from serious limitation. In its present form, the tool does not appear to recommend itself for any use.

Reviewed by :

Dr. B. C. Paramashwaran
Prof. & Head
Deptt. of Psychology
Osmania University
Hyderabad.

- (5)
1. Name of Test : MEDICAL CONSERVATIVE ATTITUDE (NTL - 315)
 2. (a) Language of test : Hindi
 - (b) Language of manual : English
 3. Format of Test, such as reusable test booklet separate answer sheets etc. : Consumable
 4. Time for administration : --
 5. Number of forms available : No other forms is available
 6. Date of publication (if any) : --
 7. Price : --
 8. Author's name and position : L.N. Dubey
College of Education
Psychology & Guidance
Jabalpur.
 9. Publisher : Agra Psychological
Research Cell,
Tiwari Kothi,
Belanganj,
Agra - 4.

Introduction:

The Introduction to the test provides a description of some of the qualities of radicals and conservatives. One would have desired in this manual information about the objectives of this test, the conceptual framework as operationally defined in terms of variables constituting the dimension intended to be measured. The introduction as it obtains is not of value to any user of this test and hence it could have been detailed as indicated above to guide the user in understanding the rationale on which the test is based.

General Description:

The scale consists of 60 items covering three areas viz., personal, social and religious, each area having 20 items. However, one would have desired information on how the items were identified, the areas selected and the number of items area wise in the preliminary scale. How the final item to constitute the scale were selected is not indicated leaving quite an amount of doubt as to the procedure followed to construct the scale.

Format and Administration:

This is not provided in the manual which could have been done except for

the instruction to the respondents in Hindi. This is a self administering type of scale with a five point response category ranging from 1 to 5, the higher score indicating agreement. No information is given about the toning of the item, whether all of them is in the positive or negative direction. Detailed informative about the method of administering individually or in groups, scoring direction, item direction, etc., should have been indicated as part of the information to the user.

A table containing classification of the respondents based on the magnitude of the total scores in the scale is given for males and female separately and also for each of the attitude areas, viz., personal, social and religious. No information, however, is provided as to the purpose of this classification and how it could be used and also what is the basis on which the categorisation is made. Surprisingly there is a category called "highly radical" with a score of 240 & above. But how this is decided could be anybody's given the author has unless give cares to this information.

Item quality:

Since the items are in

Hindi, it is difficult to assess the import, meaningfulness and the language used. One would have desired a brief account of the way the items were formulated taking into consideration the direction available for writing attitude items.

Since the scale consists of 60 items having an equal number of items in each of the selected areas, assuming that the author would have used some statistical procedures for item selection, one will wonder how he could get equal number of items in each area.

Reliability and Validity

Reliability has been reported using K.R. formula and split-half method area-wise and for the total scale. For the latter, the reliability coefficients are, .86, by K.R. Formula, .91 (split-half).

The internal consistency of the scale has been worked at through correlations of area score with total scores and reported under validity as item analysis validity coefficient. In other words, there is no attempt made to work out the validity of the scale.

Norms:

distributed in 6 colleges of three districts in Madhya Pradesh and included 766 boys and 474 girls in urban and semi urban areas. The mean scores and S.D. are given for the Total scale and also for each of the areas viz., personal, social and religious for boys and girls. However, one would have liked information about the procedure followed to select the sample, classwise, sex-wise, socio economic status-wise and areawise as that would have provided a better understanding of the representativeness of the sample used for standardization.

Applicability

The scale as such based on the information contained in the manual do not qualify itself for larger use as one is not sure of the procedure adopted to construct this scale. It is also necessary to indicate the population for whom an instrument is developed so that applicability to the larger population of that category could be assessed. The manual as it is too sketchy creating doubts for want of details and hence it would be difficult to recommend the use of the test.

Reviewed by :

Dr. B.C. Muthayya

- (6)
- | | |
|--|--|
| 1. Name of the Test | : Attitude Scale For Physical Education (NTL-316) |
| 2. (a) Language of test | : Hindi |
| (b) Language of manual | : Hindi |
| 3. Format of Test, such as reusable test booklet separate answersheet etc. | : Consumable forms |
| 4. Time for administration | : No time limit |
| 5. Number of forms available | : |
| 6. Date of publication and of revision if any | : 1978 |
| 7. Price | : Rs.12.00 |
| 8. Author's name and position | : G.P.Thakur & Manju Thakur |
| 9. Publisher | : Agre Psychological Research Cell, Tiwari Kothi, Balanganj, Agra. |

procedure adopted for item analysis is not clear. Only² hint has been given that X of independence was used to ascertain the significant of difference among various responses to different items of the scale. The groups which brought out the differences in the items like the extreme groups in some distribution has not been stated. The authors mention that in the final form, items which were significantly different at one percent level of confidence were retained. This is perhaps about the discrimination value of the items. But how this value has been worked out has not been explained.

About scoring the scale items, it has been indicated that 5 to 1 scores are to be used for responses to each item in terms of the intensity of attitude revealed. Scoring in case of negative items to be reversed to 1 to 5, but which statements are negatively worded has not been specified.

The validity of the scale has not been adequately ensured. As stated earlier, the determination of the construct validity has only cursory been attempted. It has been tried to establish criterion validity by administering the scale to athletes and nonathletes, with the assumption that athletes will show higher score on the

scale. The authors mention that athletes did show significantly higher score. But the number of cases is small (N=16). No validity coefficients and basic statistics of difference have been reported. Thus, the determination of validity has not reached a satisfactory level.

Split half and test-retest reliability coefficients are reported to be .78 and .72 respectively. The sample sizes for determining reliability have not been reported. For split-half reliability, the number of items is only eight in each part which is quite small. The reliability coefficients considered satisfactory by the authors have only limited value in view of the inadequate procedures used for the establishment of both reliability and validity.

As all attitude scales are short-term tools, so is the present scale. Since the validity and reliability of the scale have been determined in a limited manner and information on several points is wanting, it may be suggested that the test be revised and properly edited.

Reviewed by :

Dr. T. S. Dhapole
Prof. & Head,
Deptt. of Psychology
Kasi Vidyapith,
Varanasi-221002.

(T) 1. Name of Test

ATTITUDE SCALE FOR
PHYSICAL EDUCATION
NTL -316

2. (a) Language of test : Hindi
(b) Language of manual : English

3. Format of test, such: as reusable test booklet, separate answersheets etc. : Presumable

4. Time for administration : There is no time limit

5. Number of forms available : No other forms is available

6. Date of publication and of revision if any : 1978

7. Price : Rs.12/-

8. Author's name & position : G.P. Thakur, & Manju Thakur
Psychology Department
University of Bihar
Muzaffarpur.

9. Publisher : Agra Psychological
Research Cell,
Tiwari Kothi,
Balanganj,

10. Applicability : Male and females,
but no age group is
given.

Introduction & Conceptualization:

In manual no introduction of the test has been given by authors. No conceptualization of the concept & construct of physical education has been given in the manual. Only the purpose of the test construction is mentioned as an attempt to develop an attitude scale to ascertain attitude of people towards physical education. The concept and construct used should have been well defined before item selection.

Item Pool:

No original pool of items is given in the manual. It is only mentioned that 68 items concerning various areas of physical education were framed by the investigators and remaining were collected from the literature. But, no literature is mentioned. It is essential as a test user in future may know what is the relevant literature of the area. This desirable if the original pool of items are also given in the Annexure of the manual, so that future test user may see the items, which were dropped out in pre-testing or final tryout.

In original item pool of this type of scale, the teachers and students of the physical education colleges should also be consulted and items given by them could be included in first layout. For item analysis X² test of independence is used. But it is not mentioned in the manual, how it was done. Only it is mentioned that final scale has only 16 items. There was a need of rigorous item analysis.

Applicability:

The sample of the study was 450 males and females of North Bihar. The sample selection procedure is not given in the manual. There should be clear cut format of sample selection, so that a cross section of the population may be represented in the sample. It is also not mentioned in the manual whether these 450 males and females were of Rural or urban areas. What was the age range of these subjects?

In my opinion this was the basic need to make the sample of the study a "representative" sample, so that future test users may be clearly guided that this test can be used only on this particular sample of the population.

Scoring:

The manual clearly states that arbitrary weighting method was used to score various responses. The scoring method is a five point rating scale. Apparently either Likert's or Thurstone's method was not followed. The scores assigned to particular point are given as 5, 4, 3, 2 and 1, but negative item of the scale are advised to be scored in the reverse way. But, another has not mentioned anywhere in the manual the positive and negative items. Thus, how correct scoring will be made.

Reliability of the Scale:

The split-half reliability and test-retest reliabilities were computed. The coefficients were to be .78 and .72 respectively.

But in reporting the reliability coefficients the means, standard deviations and standard errors of measurements of different groups should also be mentioned, which are missing in the manual.

The procedure of reliability should be rigorously adhered to, so that the future test user may clearly know how far the test measures consistent over a period of time.

Validity of the Scale:

The validity of the test is calculated by calculating the significance of difference of two known extreme groups (i.e. athletes and non athletes) by 't' test. The basic need to use this method is to show the skewness of the data. The authors used non parametric method (χ^2) in item analysis, while used parametric (t test) method in computing validity of the test. No rationale has been given for this approach.

The test has not been validated with any validated criterion. If it is not available, then concurrent, construct and predictive validities could have been calculated.

Practical Consideration in administration and use of the Test:

So far as administration is concerned, no time limit is given. Instruction are clear. Scoring is ambiguous, hence interpretation of the scores will be difficult for future test users.

No norms are given as this is the basic and most important step in test constructions.

There is only one reference in the manual. There was a scope to give appropriate references in the area of study.

Reviewed by :

Dr. Virendra Sinha
Addl. Director of
Education,
Directorate of
Education U.P.
Allahabad.

- (8)
- | | |
|---|---|
| 1. Name of Test | : MEASUREMENT OF ATTITUDE
TOWARDS INTERNAL
EVALUATIONS (NTL-317) |
| 2. (a) Language of
test | : English |
| (b) Language of
manual | : English |
| 3. Format of Test,
such as reusable
Test booklet,
separate answer
sheets etc. | : Consumable |
| 4. Time for admini-
stration | : It requires 15 minutes
for its administration |
| 5. Number of forms
available | : No other form is
available |
| 6. Date of publicat-
ion (if any) | : 1972 |
| 7. Price | : Rs.12/- |
| 8. Author's name &
position | : Dr. B.A.Parikh
Psychology Department
M.T.B. Arts College,
Susa - 395001. |
| 9. Publisher | : Agra Psychological
Research Cell
Tiwarí Kothi,
Belanganj,
Agra - 4. |

Nature and scope of the scale :

This is a 40-item scale for measuring adult subjects attitude towards internal evaluation as applied to higher education. The author of the test claims that this scale is basically meant to be used as a tool of research or as a tool for guidance. The construct of attitude which is measured by the scale is defined in the test manual. This is an attitude scale of the Guttman-type, possibly developed using the procedures implicit in this model. But these details, unfortunately are not given in the test manual.

Nature and adequacy of the items:

The forty items forming the scale belong to five categories as detailed in the test manual (p.6). The items appear to be somewhat adequate and exhaustive. However a closer examination revealed some inadequacies in the item in the final scale. The adequacy of an attitude scale ultimately depends upon the face and construct validation which appear to have been attained by the scale. How adequate is the universe of behaviour sampled by the items ? Items which represent theoretical justification for internal

evaluation are not included in the scale.

The following are examples of important statements which should have appeared in internal evaluation of this scale: (i) Only through internal evaluation, we can evaluate some higher personal and complex objectives set by the teacher, (ii) Internal evaluation is the only solution to the measurement of certain complex affective and psychomotor outcomes which can be evaluated after a prolonged observation by a teacher, (iii) External evaluation cannot take care of product evaluation required a good deal of teacher-student interactions; (iv) It is a democratic right of a teacher to evaluate his students in his own way.

It is quite possible that items of this kind were present in the initial pool, but got eliminated at the time of item selection. Unless items representing such cluster were given a heavy weighting in the initial pool, this is likely to happen. Any way, the scale appears to sample only statements which relate to the external aspects of internal evaluations, and fails to enter into the deeper and

complex implications of the construct of internal evaluation.

Item selection Procedures:

The Preliminary pool of 80 items have been reduced to 40 items through successive item analysis, the point-biserial coefficient of correlations of the items with scores on the total test, has been used for deciding the discriminating power of items. The rationale behind the statistical procedure of successive item analysis, till the indices get stabilized--appears to be sound. This method would yield good results if all the sub-components are given near-equal representation or weightage in the initial pool of items. If on the other hand, we start with a pool representing a narrow range of psychological traits, the resulting final test will only represent little more narrower version of the original pool. It is difficult to decide whether this has happened with the present test. In the absence of full information relating to this aspects it is difficult to decide whether this has happened with present test. It is desirable that the original pool of items are also

reported in the test manual. The item analysis data is not reported in all essential details. The nature or size of the sample used for the series of item analysis left to the inspiration of the users. In the absence of this data, it is difficult to give any meaning to the reported biserial coefficients.

Adequacy of the format:

The test is long enough to yield high coefficients of reliability and short enough to be tested within limited time (say 15-25 minutes). It is given in the form of reusable test booklets with separate answer sheets. But the published form of the test contains only 40 items together with the three-point response space given against these items. This booklet will not be reusable. The claim of the author that it is a self-administering scale has been negated subsequently by his own observation (on p.9 of his manual) that the purpose of the scale will have to be properly explained and proper rapport established if proper responses are to be obtained. The test booklet does not contain any material which supports the claim that it is self-administering. No directions regarding the mode of responding to the test is in evidence neither in the

test booklet or the manual. The scoring procedure is clearly explained in the booklet. The claim of the author (p. 5 of the manual) that the scale can be used for measuring the attitudes of teachers and their parents interested in the education of their children, cannot be accepted in toto. The parents, unless they are educated enough to understand the implications of the concept of internal evaluation, cannot respond to the test in a meaningful way.

It is unnecessary to point out in this connection that the language used in specialised meaning instruments like the present scale should be flawless. There are many printing errors present throughout. The title as given in the outer cover of the test manual ends with the word 'evaluations' when the correct title should end with the word 'evaluation' as given in the first inner page of the manual. Again if we examine 29, it is difficult to decide whether it is positive or negative towards the social object measured-internal evaluation. The language listed in a number of items e.g. items mentioned 6, 15, 16, 23, 39 etc. needs to be improved.

Validity and reliability:

The scale reports empirical data in support of the validity and reliability of the scale. But much of this would not improve a user's confidence in the scale. Of the three reliability coefficients reported, only one appears to be satisfactory (the coefficient of Reproducibility using Cornell's Technique). The two other values are low, and do not reach the desired level (viz. coefficients close to .8). The split-half reliability, even after corrections for shortening comes to only .57. The other reported value is .61. The different level of efficiency indicated by the three indices make the whole data somewhat suspect. Also, it is difficult to interpret the coefficients in the absence of adequate information about the nature of the samples used for these studies.

The external criterion used for estimating the validity of the scale is one that would not normally be selected by a person who has even minimal understanding of the psychological processes implied in the procedure. It is very strange that the author decided to provide evidence of the validity of his test by treating marks obtained in internal examinations as external criterion. The author probably started by

assuming that there would be a considerable overlap between one's attitude toward internal evaluation' his marks in internal examinations, and that this will be indicated in the form of correlation. This procedure is no better than validating the test against external examination marks. A good student could be expected to fare well in both internal and external examinations, and he will even have a good attitude towards all the practices in education, including internal evaluation. This will be indicated by a positive correlation between scores in the attitude scale and all forms of examination marks. While the procedure adopted is in itself questionable, the obtained correlation of .735 is spuriously large. Even if we compare more closely related criteria. (like way scores on a verbal test of intelligence with another verbal test of intelligence), it is very unlikely that it will yield a correlation of this size. One is left guessing about the unusually large validity coefficient. The details of the sample used for establishing the validity are not reported in the manual. The validity coefficient in this case exceed two of the reliability coefficients. It is to be presumed that we cannot place much reliance on the validity and reliability data supplied in the manual.

Norms:

The adequacy of the norms supplied with a test will have to be assessed first in terms of its adequacy for the purpose to be served by the test, and secondly in terms of the representativeness of the sample population on which the norms have been developed. The manual provides T-score equivalents of raw scores. The nature or even the size of the sample on which the norms have been developed, is not reported. In the absence of this basic information, the table of norms cannot be used with any degree of confidence. Other background information about the scores-shape of score distributions, M, SD, of the total sample and sub-samples, based on sex, local, subject of specialization etc. is also lacking. The rationale of the classification scheme given towards the end of the test manual (for classifying subjects on the basis of the attitude scores) is not clear. Categories require renaming. For example, the category 'very much less favourable' needs to be reworded even from the point-of-view of correct usage.

Evaluation:

The test in its present form cannot be recommended for use either as a research tool or for other positive scientific uses. The instrument will have to be drastically revised before it is put to serious use.

Reviewed by :

Dr. A. Sukumaran Nair,
Spl. Officer to Govt.
of Kerala,
State Institute of
Education,
Trivandrum,
KERALA.

- (9) 1. Name of Test : MEASUREMENT OF ATTITUDE
TOWARDS INTERNAL
EVALUATION (NTL -317)
2. (a) Language of test : English
(b) Language of manual : English
3. Format of Test, such as : Consumable
reusable Test booklet
separate answersheets
etc.
4. Time for administration : It requires 15 minutes
for its administration
5. Number of forms : No other forms is
available available
6. Date of publication : 1978
and of revision
(if any)
7. Price : Rs.12/-
8. Author's name and : Dr. B.A. Parikh,
position Psy. Department
M.T.B. Arts College,
Surat - 395001.
9. Publisher : Agra Psychological
Research Cell,
Tiwari Kothi,
Belanganj,
Agra.

The scale aims at
measuring attitudes towards
internal evaluation as a
system of examination. The

scale consists 40 state-
ments in favour or
against internal evalu-
ation. The author has

well scanned the literature on examination system in order to draw and frame statements. Thus, the first step to ensure the validity of the construct is well taken care of. But a perusal of the items in the final scale form reveals that framing of the statement has not been satisfactory. For example, item No. 26 is a statement which does not fear on internal evaluation as such. Some statements are double barrelled (e.g. no.29,30) because agreement with the statements does not make clear whether the response is in favour or against internal evaluation. A number of statements are ambiguous as they have been qualified with the prefix 'some' e.g. some teachers do this or that in internal evaluation. Such statements reduce the validity of the concept. Moreover, the statements are not short and simple.

The statistical techniques followed for item analysis appear to be sound. It is reported that point biserial correlations were worked out at two stages of screening of items. It would have been better had the author reported the coefficients for all the 30 items. The size of the sample has not been reported.

The arrangement of the statements as positive or negative is satisfactory. The scoring of the responses has been clearly indicated.

Validity of the scale has been determined in more than one way. The initial selection of the items from relevant sources ensured sufficient content validity of the scale. The author reports that five experienced teachers also examined the statements. But he omits to explain what exactly the teachers did to enhance the validity of the items.

The point biserial correlation coefficient also supports the validity of the items. Determination of criterion validity has also been attempted by correlating the scale scores with scores obtained on internal evaluation by a group of 50 students. However, the educational level of these students has not been reported. The criterion validity coefficient has been reported to be quite fairly high (0.730).

The reliability of the scale has been determined by split-half technique. The corrected index by S.B formula is rather low. This index has gone slightly up by using other formula. The

Other forms of reliability have been also tried, it could have provided better assessment of reliability of the scale. In the absence of sufficient evidence of reliability, it is hard to accept the author's claim that the scale has demonstrated fairly good reliability and validity.

The possible applications of the scale have been indicated by the author. It has been developed by using the sample of subjects for which the scale is specifically pertinent, i.e. the student group.

It may be concluded that the author has tried to develop the scale by following the steps systematically and seriously. However, the lacunae pointed out above need to be remedied and additional evidence relating to validity and reliability of the scale should be collected and appended to the manual.

Reviewed by :

Dr. T. M. Shapole,
Prof. & Head,
Department of Psychology
Kasi Vidyapith,
Varanasi-221002.

- (10) 1. Name of Test : ATTITUDE TOWARDS NCC ACTIVITIES (NTL-318)
2. (a) Language of test : English
- (b) Language of manual : English
3. Format of Test, such as reusable Test booklet separate answer sheets etc. : Unusable
4. Time for administration : There is no fixed time limit
5. Number of forms available : No other forms is available
6. Date of publication and of revision (if any) : 1978
7. Price : Rs. 12/- per specimen set
8. Author's name & position : Dr. B.A. Parikh
Psy. Department
NTB Arts College
Surat - 395001.
9. Publisher :

This scale aims to at providing an effective tool for measuring students attitude towards NCC training. Thurstone and Gheve equal appearing interval scale method has

The S(Scale) and Q (Quartile deviation) values for each statement has been calculated on the basis of the judgement obtained from 50 judges on an eleven

basis of the scale value, twenty two statements indicating equally spaced values were selected for this test. However, some of the statements appear to be ambiguous. For example, statement No.5 "NCC organisation is an organisation to provide employment for retired and low categorised officers and soldiers". This item could have been further split in two or three items.

Similarly, statement No.16 "NCC training provides a good outlet for the energy of aggressive and dominant students". Here aggression and dominance have been considered as synonymous though they are independent traits. Even according to Murray's classification, they represent different needs. Hence, this item also could have been split into two items.

Item No.3, there is some printing mistake as the word 'legs' has been printed as 'Leges'.

In view of the above observations it is felt that the test falls short of the required standard inspite of following psychometrically sound procedure for selecting statements.

The scale is self-administering and it takes about ten minutes for its administration. The score of an individual is based on the arithmetic average

of the median of the Scale values of the statement agreed by him.

The reliability of the scale as determined by (i) test retest (ii) split half and (iii) alternate form methods ranges from .82 to .86.

The validity of this scale is based on the opinion of experienced NCC officers. It is further based on computing the score of student who joined NCC and those who didnot join and those who joined WSS or other activities. The obtained ratio was significant at 0.01 level. Here, also the size of the sample in each group was only 25. This does not appear to be an adequate size for determining the validity of a test.

In view of the small sample and more extensive work with some modification in items is needed to make it a useful test.

Reviewed by :

Dr.K.K.Januar,
Reader,
Deptt. of Psychology
Patna University,
Patna - 800005.

- (11) 1. Name of Test : ATTITUDE TOWARDS
NCC ACTIVITIES
(NTL - 318)
2. (a) Language of test : English
(b) Language of manual : English
3. Format of test, such : Consumable
as reusable test book-
let separate answer
sheets etc.
4. Time for administration : There is no fixed
time limit
5. Number of forms : No other form is
available available
6. Date of publication : 1978
if any
7. Price : Rs.12/- per specimen
set
8. Author's name : Dr. B.A. Parikh
and position : Psychology Deptt.
MTB College,
Surat -398001.
9. Publisher : Agra Psychological
Research Cell
Tiwari Kothi,
Belanganj,
Agra.

Nature and scope of the Scale

This is a scale of attitude intended to measure the attitude of subjects towards the NCC programmes conducted in educational institutions in India. The scale is intended for the use with students. Whether the scale is to be used for school/college students or both is not clear from the manual. The author claims that the scale will be of use to authorities who are concerned with the selection or guidance of students who turn upto NCC Training. The author has also intended this to serve as a part of any research study where a student's attitude towards NCC Activities figures as one of the variables.

Items of the Scale

The scale has been conceived as a 22-item attitude scale constructed using Thurstone Equal-appearing Interval Technique. The items have been selected using the conventional procedures followed in attitude scale construction. One would have expected greater variety in the items. Items 1 to 10 are negative towards the construct, while items 11 to 22 are statements which are in support of the construct. This is not in consonance with the usual practice of

mixing positive and negative items in attitude scales. It is not clear as to why the author departed from this useful practice.

The items do not appear to cover many of the expected aspects related to the NCC Programme. Statements concerning NCC treated as a second line of defence of the country, NCC as a training ground for future military leadership, NCC as a method of developing confidence in oneself, the possible carry over value of military discipline into all walks of life when students take up different Professions later in life, its influence in developing positive attitude towards group tasks, its role in building up a disciplined nation, its role in training the mind and the physique, its ability to develop a fuller personality in individuals, etc. are examples of some of the items which should have gone into the scale. Possibly the range can be expanded much more.

Although many authorities consider that a high level of reliability can be reached with an attitude scale of about 20 items. One should be cautious in following this

principle in a blind fashion. The 22 items scale in my view cannot do full justice to the construct to be measured. A small scale should be thought of only when it is the end product of which comes from the sophistication of a number of scales each containing items of proven efficiency. With shorter scales even when we are able to demonstrate a high degree of reliability, we are often doing it at the cost of validity--notably of face and of construct validities. The test follows the rationale of Thurstone-Equal Appearing Internal Scale.

Item Selection Procedure adopted:

Item selection procedure used in the test also follows the procedure suggested by Thurstone in this regard. The selection has obviously been made using the S-1 and Q-values of items as decided by judges. The test manual states that 58 judges had done the item selection. Information relating to the compliance of the judges to do this task, the method of selecting them and other related information is not presented in this manual.

A summary of the Q-values and S-values are given. But this does not provide the necessary

information about the efficiency of individual items included in the scale. The author states in the test manual that an alternate form of the scale was developed. Nothing more is said about this alternate form except that it was used for testing the suitability of this scale. One would extract that the alternate forms would also be provided or what is still better added to the present scale so that its length can be increased.

Adequacy of the manual:

The manual does not find any details about his mode of administration or how the test is to be answered, if it is treated as self administering. The scoring procedure is also not properly explained. The statement in the manual that "the score of an individual be taken as the arithmetic average or the medium of the scale values agreed to by him" is highly inadequate or leaves one guessing as to whether it must be Arithmetic Mean or the Medium score that should be the score of an individual who has reported to this test. The test manual provides the medium scale values corresponding to the items in the scale but it is given on a separate sheet and as such it, is very unlikely that an average user will connect this with the scoring procedure given

given on page 4 of the manual. The statement that "minimum and maximum scores indicate favourable and unfavourable attitude which the middle score indicates mental attitudes towards NCC and activities" is very native and serves no useful purpose. There are no objective guidelines for interpretation of the scores obtained using the Scale.

Validity and Reliability:

The test manual provides evidence of reliability by three different methods--test-retest reliability, Split-half reliability and alternate form reliability. All the coefficients are satisfactory especially when we consider the relatively small samples on which they have estimated. However, and in the absence of any information about the parallel forms used for estimating the third form of reliability, it is difficult to say how adequate this coefficient is. However, considering the rather high coefficient (.83) obtained, it is to be concluded that the second forms comes very close to the first form.

Validity of the test has been estimated by showing that the mean score on the attitude scale is significantly different for three groups--those enrolled in the NCC, those enrolled in the NSS and those who do not belong to either of these groups. Analysis of variance has been used to see whether the three

groups significantly differ. The introduction of the NSS groups, in the analysis has tended to confuse the issue. If the study was conducted with just two groups--NCC and non-NCC, the significant F-values would have shown that the two groups differ from each other. These would have been taken as evidence of the validity of the test. But with the NSS group introduced into the analysis, we are not in a position to say whether the significant mean differences indicated is due to which particular groups or pairs. Here a significant difference between the NCC and the NSS groups could be carried as a significant F-value, while we will be interested in knowing whether the NCC groups differ from the non-NCC Group. Hence unless the analysis of variance is followed by t test, it will not be possible to decide which pair or pairs are responsible for the significant F-Value. This analysis, however, can be taken as partial evidence of the validity of the scale.

Norms :

The test does not provide norms of any kind. There is no evidence to show that the test has been given actual try-outs, except for the limited

numbers on whom the reliability and validity studies have been conducted. One would expect that a test which has appeared in the published form should be administered on a broad and representative sample (say 300-500 subjects) and norms worked out. Any meaningful interpretation of the test scores presumed the availability of norms in some form say percentile norms, T-scores, stanines or some suitable procedure which will help in interpreting raw scores. The absence of norms minimises the utility of the scale very much.

Evaluation:

The scale requires to be restandardized on a large sample with more items included if possible, and norms have to be worked out before the test can be used for research or allied purposes. The manual also needs to be revised to correct the shortcomings before this can be recommended for extended use.

Reviewed by :

Dr. A. Sukumaran Nair,
Commissioner for Education-
al Development & Research,
State Institute of Education,
Trivandrum,
K E R A L A.

(12) 1. Name of Test

ATTITUDE SCALE FOR
TOO-FIND PRO & ARTI
MANAGEMENT (NTL-919)

2. (a) Language of test : English
(b) Language of manual : English

3. Format of Test, such as reusable Test booklet separate answersheet etc. : Consumable

4. Time for administration : There is no time limit

5. Number of forms available : No other form is available

6. Date of publication and of revision (if any) : --

7. Price : Rs.12/- per specimen set

8. Author's name and position : Dr. K.D. Kapoor,
P.P.N. College,
Kanpur.

9. Publisher : Agr. Psychological
Research Cell,
Tiwarī Kothi,
Belanganj,
Agra.

Review:

Definite knowledge about the attitude of employees towards their management can be profitably utilized for maintaining cordial employer-employee relationship. This attitudinal relationship between management and employees may be classified into three groups:

- (a) Pro-management employees
- (b) Neutral employees
- (c) Anti-management employees

The authors tried to develop an attitude scale for the objective assessment of the above noted three groups of employees. He collected 100 statements (51 unfavourable and 49 favourable) and utilized 100 judges to obtain scale values of all the statements using Thurstone's 'Equal appearing intervals' method. The judges were asked to sort all the statements into 9 categories according to the intensity of favourableness or unfavourableness. The manual, however, does not provide any information about nine categories and distribution of the judgements. The author finally retained 20 statements to constitute an attitude scale for the purpose mentioned earlier. Some of the test items appear to be not well constructed and appropriateness of a few items towards the

the objective of the test is doubtful.

Scoring and Interpretation:

The authors suggested Likert's method for scoring the attitude scale. Thus the opinion could be scored by putting 5, 4, 3, 2 and 1 against strongly agree, agree, uncertain, disagree and strongly disagree responses respectively, for favourable statements. For an unfavourable statements this principle of scoring was reversed as is usual with this type of attitude scale. Then a total score could be arrived for each subject.

The manual does not provide any information about the interpretation and distribution of the total score of 60 markers considered for the development of the scale. Moreover, positive and/or negative statements have not been indicated anywhere. Furthermore, statements in the questionnaire do not provide any Thurstonian Scale value which the authors has mentioned in page-6 of the manual. Under the circumstances, proper scoring and interpretation

is difficult unless the researcher is interested to find out his own ways and means of interpreting the final score.

Reliability & Validity:

Detailed procedures of determining the reliability and validity have not been mentioned in the manual. Reliability coefficient (off-even) was found to be .32. As regards validity r between supervisor's rating and obtained score was .79.

The authors did not mention anything about the number of cases (subjects), number and characteristics of raters and many other information which are necessary to use the scale in a beneficial way. The raters judgements, are likely to be biased due to the halo effect which is usual with this type of rating. It is not mentioned what steps were taken to reduce rater's bias.

Utility:

In view of these facts, the scale has several limitations. Some of the important limitations are mentioned below:

The nature of sample used for

- (a) Standardization has not been properly described.

- (b) Statistical treatment of the data is not adequate.

- (c) Since normative data has not been provided, it is not possible to classify the subjects into three groups on the basis of scores obtained from the scale.

- (d) It is not clear as to how and why the authors has combined the Thurstonian scale with that of Likert weight during the developmental stages of the scale.

Because of so many limitation, effective and practical use of the scale could not be recommended.

- 11. References: The manual provides 10 references of Indian and Foreign researchers.

Reviewed by :

Dr. R.N. Kundu
Prof. & Head
Deptt. of Psychology
Calcutta University
Calcutta-700008.

- 13) 1.. Name of Test : SOHNI ATTITUDE SCALE
FOR MEASURING ATTITUDE
(HIGH SCHOOL & HIGHER
SECONDARY STUDENTS)
(NTL - 321)
2. (a) Language of test : English, Hindi & Punjabi
(b) Language of manual : English
3. Format of Test, such : Consumable
as reusable Test
booklet separate
answersheets etc.
4. Time for administration: There is no time limit.
Each student should be
given enough time to
finish the test.
5. Number of forms : No other form is
available available
6. Date of publication : 1972
and of revision
(if any
7. Price : Rs.25/- per specimen
set
8. Author's name & : T.S. Sodhi
position School of Education
H.P. University,
Simla.
9. Publisher : Mukand Publication
388, Dr.Hira Singh Road,
Civil Lines, Ludhiana,
Punjab.

The author studied attitudinal differences in the students of secular and religious institutions in connection with his doctoral thesis. As an after thought, he decided to publish the attitude scales for wider use to evaluate the attitude of young children.

The scales cover five different psychological objects viz., teachers and parents, discipline, life and humanity, country and religion. However, no further conceptual specifications of these are provided without which one wonders about the nature of the scales, preciseness in measurements arrived at through their use and even the purpose for which one could utilise them.

A close scrutiny of items under different scales shows that many of them are vague, ambiguous, repetitive, or irrelevant. Even a cursory look at a few items cited below as specimen will substantiate these technical limitations of the items in the scales.

I. 9 Unreasonable orders of parents need not be obeyed.

10 Even when the parents are unreasonable they should be respected

11 We should happily marry at the place selected by our parents.

II 6 We must respect our office bearers.

7. Act of indiscipline by the brilliant students should be pardoned.

III 1 In spite of failures and frustrations we should be cheerful.

2. It is pretty difficult for me to accept my mistakes.

IV 2. The land of my country is as sacred to me as my place of worship

3. My nation is a nation of friends and philosophers.

V 4. What he does is always the best.

14. One who leads a sinful life goes straight to hell.

20 By dint of good actions one goes straight to heaven.

(Roman numbers indicate scales and the others, the item numbers under different scales).

Item analysis procedures adopted for computing discriminating power is not appropriate. It is not proper to treat responses in an attitude

scale as right or wrong as done in the present case.

Regional percentile rank norms for boys, girls rural and urban categories of students have been provided separately. However, the sampling details given are too meagre to judge the representativeness of the sample used and also the scientificness observed in its selection.

Some more details as to how opinion of teachers, parents and intimate friends were collected and rendered on a seven point scale could have made coefficient of validity more meaningful. The year of publication should have been given, it has certain implications while judging the suitability of a test.

On the whole the scales developed do not reflect much scientific rigour as developmental input for standardising them. Users will do well if they have a careful look at the scales before picking them for use.

Reviewed by :

Prof. M. S. Yadav,
M. S. University,
Lokmanya Tilak Marg,
Baroda
G. U. J. A. H. A. T.

(18) 1. Name of Test

: SOHJI ATTITUDE SCALE
FOR MEASURING ATTITUDE
(HIGH SCHOOL H.R. SEC.
STUDENTS) (NTL-321)

(a) Language of test

: English, Hindi & Punjabi

(b) Language of manual

: English

3. Format of Test, such
as possible test book-
let separate answer
sheets etc.

: Consumable

4. Time for administration

: There is no time
limit, each student
should be given enough
time to finish the
test.

5. Number of forms
available

: No other form is
available

6. Date of publication
and of revision
(if any)

: 1972

7. Price

: Rs. 26/- per specimen
set

8. Author's name &
position

: T.S. Sodhi,
School of Education
H.P. University
Simla

9. Publisher

: Mukand Publication
388, Dr. Hira Singh Rd.,
Civil Lines,
Ludhiana, Punjab.

Sodhi's attitude scale is an instrument to measure attitudes of high/higher secondary students towards teachers and parents, discipline, life and humanity, country and religion. The manual which is in English outlines the purpose of this scale. The attitude scales are developed to "assess the degree of change that is occurring in the attitude of students in the different areas of social environment as a result of different types of measures". According to the manual, the educationists should develop positive attitudes among the students and to usher the changes introduced through education, there is a need of attitudes scales. The scales, however, do not fulfill high sounding goals due to lack of appropriate conceptualization and scientific approach in measurement of attitudes.

The manual provides a description about the development of this scale. The author started with thirty items in each of the five areas of attitudes. However, after the item analysis, the number of items retained for each area are follows:-

Name of the area	No. of items
Attitude towards teachers and parents	12

Attitude towards discipline

Attitude towards life and humanity

Attitude towards country

Attitude towards Religion

The psychometric criterion used for selection of items is primarily based on discriminating power of the items. A critical evaluation of the five areas of attitude suggests that careful conceptualization of the problem has not been done by the author. One fails to find rationale in combining attitudes related to teachers and parents, and attitudes related to life and humanity.

As a matter of fact students may differ significantly in their attitudes towards parents and teachers and towards life and humanity. The items of the test carry multiple meanings and are therefore suspect about the existence of issues. For example item No. 1 reads like "I have great regard for my teachers" and is respectable language for them even in their voice. Similarly, item No. 2 is written as the days are gone when teachers were "gurus". Now they are money makers. There are some of the examples of ambiguity inherent in the items of the test. There is no conceptualization about

the various possible dimensions of a particular attitudes and therefore, one gets confused at the ways the items are written. The scale designed to measure attitudes towards life and humanity has items related to frustration, empathy feeling, affection, hate love, selfishness, social responsibility, interpersonal interaction, influence etc. It is very difficult to make out the conceptualization behind such kind of measurement. In a way, the title and the real content of the items are highly misleading.

There is an attempt to fulfil the psychometric requirements of the test in terms of reliability and validity. The scales were administered twice on 239 students after a gap of one month. The correlations between the scores in the first and second test in the different areas of the scales ranged from .74 to .89. For validity of each scale, three external criteria based on ratings on separate point scales of teachers, parents and friends were taken. The scale scores in each area were correlated with the three rating scores separately and thus three validity co-efficients, were computed. The reported validity co-efficients ranged from .54 to .85.

The manual presents separate percentile norms for total groups as well

as for boys and girls for rural and urban students. The author calls it regional norm as the norm development data were collected from the students of Punjab, Haryana, Himachal Pradesh and Chandigarh. The percentile norm tables are provided for each area of attitudes.

Any norm for attitude measuring device has several limitations. Attitudes do change due to social changes and due to interventions of events taking place in the large socio-cultural context. Therefore, normative interpretation of attitude scores does create problem.

The author has not taken into consideration the problem of social desirability. To me, it seems that a scale scores will correlate highly and positively with the social desirability responses.

In my judgement due to poor conceptualization of attitudes towards social environment, this measuring instrument is of poor quality. This should not be used either for research or for any applied purpose. Readings of the scales and the manual may provide, however, some insights to avoid mistakes committed in it to those who would like to develop some attitude measures.

Reviewed by :

Prof. J. Pandey
Prof. & Head
Deptt. of Psychology
Allahabad University
Allahabad - 211002.

(15) 1. Name of Test

ATTITUDE SCALE FOR
RELIGION (NTL-322)

2. (a) Language of test : Hindi

(b) Language of manual : English

3. Format of Test, such as reusable, test booklet separate answer sheets etc. : Consumable

4. Time for administration : There is no time limit. The scale should be completed within 32 to 35 minutes.

5. Number of forms available : No other form is available

6. Date of publication : 1974

7. Price : Rs. 10.65/- per specimen set

8. Author's name & position : Dr. R.K. Tandon
K.G.K. College,
Muradabad (U.P.)

&
Dr. R.K. Tandon
Barilly College,
Barilly.

9. Publisher : Smt. Karuna Tandon
2 K.G.K. College Building
Muradabad (U.P.)

10. Applicability : Can be used for the measuring of attitude towards religion among high school students. The content of the scale is not exhaustive.

The "Attitude Scale of Religion" is a scale that has been developed for the purpose of ascertaining whether an individual has positive or negative attitudes towards religion. The manual of the scale does not provide the essential information regarding the rationale and specifications followed in the collection of items. Few lines regarding the importance of religion as a motivational force and a quotation from the Educational Commission Report (1966) are not sufficient for elaborating the domain and coverage of the aspects of attitudes towards religion. The specification and precise definition of the components of the attitude would have provided a better guideline for the collection of initial pool of items from different sources. It is perhaps due to the lack of clarity regarding the aspect of attitude towards religion that led to the inclusion of items which can be responded in only one direction. Even a person having negative attitude towards religion would agree with item No. 1, 22 and 30. Items included in an attitude scale are meant for providing an opportunity for expressing 'pro and con' opinion and as such any item which does not furnish such an opportunity does not serve any useful purpose.

Although the scale is claimed to be developed following Likert's technique, but no information regarding test-retest reliability is furnished in the manual. The variability

description quoted below is not of much use: "After a thorough statistical analysis, 50 items were selected to prepare the final form of the scale" (p. 30).

The instructions appearing on the booklet of the scale are sufficient and clear. The procedure of scoring is also simple. Scoring is to be done on a five-point scale in accordance with the wording of statement and the extent of agreement. What is to be noted that some of the negative statements are not really negative. Item no. 29 is an example of items where disagreement is not a definite indicator of anti-religious attitude. The English translation of this item is as follows:

"The person who is polite in his behaviour is not to be considered as anti-religion."

Reliability:

Both test-retest and split-half reliabilities are remarked. The two reliability coefficients are .80 and .90 respectively. Both the reliability coefficients are high. However, it would be preferable if the procedure of splitting the scale into two parts and the time interval between testing and retesting were specified.

Validity:

The validity of the attitude scale was determined by correlating scores on the scale with self-rating of pupils and teacher's ratings obtained on a five point scale. The reproduction of the instructions given to the rater would be of much help in evaluating the validity of the scale.

Norms:

Limits of scores for categorizing individuals are provided without the specification of the statistical method or the rationale used for the setting the limits for different categories.

The scale seems to be developed in a hurry and no such suffers from technical limitations which are to be considered while making use of the scale for the purpose of assessment of attitudes towards religion.

Reviewed by:

Dr. C. Hasan,
Deptt. of Psychology
Aligarh Muslim
University,
Aligarh.

1. Name of Test : ATTITUDE SCALE FOR RELIGION (NTEL-322)
2. (a) Language of test : Hindi
(b) Language of manual : English
3. Format of Test, such as: Consumable
reusable Test booklet
separate answersheets
etc.
4. Time for administration : There is no time limit.
The scale should be
completed within 32 to 35
minutes.
5. Number of forms available : No other form is
available
6. Date of publication
and of revision
if any : 1974
7. Price : Rs.10.65 per specimen.
set
8. Author's name &
position : Dr. R.K.Tandon
K.G.K. College,
Muradabad (U.P.), &
Dr. R.K.Tandon, Bareilly College
Bareilly.
9. Publisher : Smt. Karuna Tandon
K.G.K. College Building
Line Par,
Muradabad - 244001.

Attitude Scale for Religion developed in 1967 was for M.D degree of the junior author. Later on, it was published in 1971 without any revision as is evident from the sources referred to at the end of the manual. The latest study pertains to 1967. Besides a good number of definitions of attitude have been unnecessarily provided in the manual. Similarly several names of foreign and Indian authors unconnected with the present work have been provided. These only added to the bulk of the manual and serve no useful purpose at all.

The description of the sample lacks clarity and the steps taken to develop the scale are inadequate. No information is given of the profession and religion of 260 persons of the first stage sample. Similarly it is only stated that second stage sample had 429 boys and girls. What thorough statistical calculations led to dropping of 25 items. And the basis for selection of 1219 girls and 2698 boys in the standardisation sample is missing. What is the proportion of cases selected for the sample to that of the population?

For which population and the age group the scale has been developed? If it is meant only for school students, its scope is limited. Library & Documentation Unit (N.C.E.R.T.)

Split half and test-retest reliability have been reported. But period elapsed between the test-retest session? Correlations against self ratings and teachers' estimates have been provided. Out of 15 ratings in each category, only 8 values in each category are above .50. Low correlations themselves speak volumes about the scale.

Instructions for administration given in the manual is most casually written and most of the material provided there in could be safely omitted.

The instructions on the test sheet directs the respondent to circle one of the five alternatives provided, but in the examples, the responses have been shown under parenthesis. Instruction given here is loosely phrased and needs considerable improvement. Items, for example, 4, 13, 30, 34 and 41 are not clear. Balance between positive and negative statements have not been maintained. Out of the 60 items in the scale these are only 10 negative items.

There are numerous printing errors in the manual and also in the scale. If the authors want their scale to be in the market they will have to revise it thoroughly so that it can complete

with scales in the
market which are not
only up-to-date but
comprehensive as well.

Reviewed by :

Prof. U. S. Singh,
Head,
Deptt. of Psychology
Bhagalpur University
Bhagalpur
BIHAR

- (17) 1. Name of Test : GEIST PICTURE INTEREST
INVENTORY GENERAL FOR
MALE (NFI - 333)
2. (a) Language of test : Hindi
(b) Language of manual : English
3. Format of Test, such : Reusable
as reusable Test book-
let separate answer
sheets etc.
4. Time for administration : High School and college
students can finish in
10 to 25 minutes and
more time should be
allowed to examinees.
5. Number of forms : No other form is
available available
6. Date of publication : 1976
and of revision
(if any)
7. Price : Rs. 52.30 per specimen
set
8. Author's name & : Dr. K.S. Chauhan &
position D.N. Srivastava,
Agra College,
Agra.
9. Publisher : Agra Psychological
Research Cell,
Tiwari Kothi,
Belanganj,
Agra.

Often careful adaptation of a psychometrically sound test in a different culture may be as good as and even better than developing a new one for the purpose. The Indian adaptation of Geist Picture Interest Inventory (GPIL-PA) appears to be just that the original version of this inventory is backed by some very sound rationale particularly with regard to its usability among children and adults who may lack sufficient verbal fluency. Besides the original version of this scale is perhaps rightly considered to be less ambiguous and more motivating as the pictures can be more expressive and amusing than its written counterpart. All these advantages become also inherent in an adapted scale which appears to be true in the Indian adaptation of Geist Picture Interest Inventory. GPIL-PA attempts to measure a significant segment of human interest areas i.e., persuasive, clerical, mechanical, musical, scientific, outdoor, literary, computational, artistic, social service and dramatic. A knowledge in the above areas would undoubtedly aid guidance counsellors and other professionals in their quest to help anyone who may seek it.

Adaptation of any scale must incorporate the local conditions which may mean dropping, adding, and revising

some of the original items. The authors seem to have handled this job quite well. After item preselection the author, however, should have administered the inventory to a reasonably large sample for item analysis along with a few new items so that the items retained after item analysis in one culture would be equally discriminating and valid when used in a different culture. Nor can one assure that revision would always guarantee the above qualities of the items. The authors would have actually gone for a step ahead by taking different criteria for different interests of the scale and item analysed before selecting these for the final adapted version.

The administration and scoring of the GPIL-IP appear straightforward and simple. Along with the test booklet, the authors also provide a set of scoring key which should make the job of the test administrator mechanical and easy. The manual also provides T-score norms which certainly make the tasks of interpretation more meaningful. One, however, wonders if it would not be more appropriate to establish age norms as interests are more related to one's age than grade. Establishing norms separately for boys and girls for all the interest areas may also

serve well the guidance counsellors. The authors may, therefore, try to incorporate the above suggestions in next revision of their inventory.

The GPII-IA seems to have its fair share of reliability and validity testings. Its validity has been checked against a verbal and a non-verbal interest inventory, the results of which appear encouraging. The inter-correlation matrices for different grade groups also throw considerable light on the validity of the inventory. In this connection, the authors are advised to go for as many contrast-group validation as possible in a future revision of the test.

There appears to be some very unusual findings with regard to the reliability of different interest areas of the inventory. Not only that some of the reliability coefficients are considerably low, at least three of these i.e., clerical in grades IX science and I Science and Mechanical in grade VIII has also turned out to be negative - a finding, if not due to printing errors, would be devastating to the name of this otherwise well adapted inventory and would speak on the technical expertise

of the authors. After all, conceptually and psychometrically a negative reliability is close to impossibility for a standard psychological test.

Reviewed by :

Dr. M. N. Pohan
Deptt. of Psychology
A.N.S. Institute of
Social Studies,
Patna - 800001.

- (16) 1. Name of Test : VOCATIONAL INTEREST
RECORD (NTL -337)
- 2.(a) Language of test : Hindi
(b) Language of manual : English
3. Format of test, such as reusable Test book-
let separate answer
sheets etc. : Reusable
4. Time for administration : There is no time
limit
5. Number of forms available : No other form is
available
6. Date of publication and of revision
(if any) : 1977
7. Price : Rs.27.50 per specimen
set
8. Author's name & position : Smt Kamal Dwivedi,
Mayanand Girls College
Agra.
9. Publisher : Agra Psychological
Research Cell,
Tiwari Kothi,
Balan ganj,
Agra .

In the introductory portion of the manual the author has very nicely depicted the different land marks in the development of interest inventories. She has pointed out the pioneer works of Fryer, Super, Strong, Kuder, Adkins, Allport-Vernon, Patterson, Clark, Singh and Others.

The items of the present test were selected taking into consideration the test of Shri Ram Surat Lab, Ex-Distt. Psychologist, Psychological Centre, Kanpur, patterned after Kuder,

The final form of the test, representing different activities possesses altogether 200 items, distributed equally (20 items in each area) over the following ten areas of interest:

1. Literary (L)
2. Computational (C)
3. Scientific (Sc)
4. Musical (Mu)
5. Artistic (A)
6. Outdoor (O)
7. Clerical (cl)
8. Mechanical (M)
9. Persuasive (P)
10. Social Service (SS)

The ten interest areas were chosen on the basis of several theories and for investigations presented/ reported by notable researchers mentioned earlier. Scoring and Interpretation.

Answer sheets are scored with the help of 10 stencils. Before using the stencils, correct rank is to be determined and then rank value is given against frequency of each rank.

Norms, in terms of percentile rank (PR), for college girls only are available for the purpose of interpretation. The authors should have realized the difficulty of general test users, if norms for different groups with the full description of the normative samples, are not available,

Standardization:

Manual provides little information in respect of item selection procedures and standardization samples. Sample number considered for the development of the test is insufficient. Moreover, since interest pattern of boys and girls are likely to differ the authors should have considered two separate samples of sufficient numbers for sex groups of college students.

Reliability and Validity:

The test-retest reliabilities, after one year and

after two months as provided in the manual, range from .62 to .91 and from .72 to .92 respectively, split-half reliability is .89. Data considered for determining the test-retest reliability is very poor.

Validity of the instrument is provided against self criterion by administering the test to girl students only. Sufficient proof about adequate validity is lacking. Validity with external criterion and for other groups of subjects is not available.

Utility:

The instrument, as mentioned earlier seem to embody different undesirable features such as - insufficient standardization lack of proper normative data and statistical treatment, as is required with instrument of this type etc. Moreover, the population for which the test has been developed is not mentioned in the manual. Because of these limitations, effective all purpose use could not be recommended.

References: 15 references of Indian and foreign authors have been cited in the manual

Reviewed by :

Dr. R.N.Kundu,
Prof. & Head,
Deptt. of Psychology
Calcutta University
Calcutta-700009.

- (10) 1. Name of Test : VOCATIONAL INTEREST
RECORD (NTL -337)
2. (a) Language of test : Hindi
(b) Language of manual: English
3. Format of Test, such: Reusable
as reusable test book-
let separate answer
sheets etc.
4. Time for admini- : There is no time
stration limit
5. Number of forms : No other form is
available available
6. Date of publicat- : 1977
ion (if any)
7. Price : Rs.27.50 per specimen
set
8. Author's name & : Smt. Kamal Dwivedy
position Dayanand Girls College,
Kanpur.
9. Publisher : Agra psychological
Research Cell,
Tiwarí Kothi,
Belanganj,
Agra - 4 .

The test runs on the lines of Kuder and covers a wide variety of vocational interests. Each one of the ten interest areas has 20 items for comprehensive coverage. The kit has the test Booklet, answer sheet, Scoring stencils, Record Form and the Manual. The Manual supplies the relevant information satisfactorily. According to the Manual, the selection of item is done through determination of discrimination power. Inter-area correlations are also given to check common leading. Stencils (n.10) are used to make scoring simple and easy. Indices of reliability and validity are high. Reliability is determined by the 'Split half' method and its sample size is 10 (after a year) and 25 (after two months). Self-criterion is used for determination of validity whose sample consists of 173 girls. Nineteen references are given at the end of the Manual.

The test relates to measurement of interest of girls, alone. Bigger samples are needed to determine norm, reliability and validity. Sample of boys of the same age range are crucially needed. Similarly norm for intermediate boys could have been determined to increase its

affectivity and relevance of application since vocational adjustment happens to be a concern of prime importance after intermediate education. The manual needs reorganization for placement and inclusion of items, such as administration, instruction and interest profiles. It needs linguistic correction, better printing and material organization.

Reviewed by :

Dr. N.S. Chauhan,
Prof. & Head,
Deptt. of Psychology
Meerut University
Meerut (UP).

- (20)
1. Name of Test : EDUCATIONAL INTEREST
RECORD (N.T.L. 334)
 2. (a) Language of test : Hindi
(b) Language of manual: English
 3. Format of Test, such as : Consumable
as reusable test
booklet separate
answersheets etc.
 4. Time for admini- : There is no time limit
stration for this record ordinarily
individual takes about 10
to 15 minutes time to
complete.
 5. Number of forms : --
available
 6. Date of Publication : 1975
and of revision
(if any)
 7. Price : Rs.11/- per specimen set
 8. Author's name & : V. P. Bansal,
position Govt. College of Education
Bhiwani.
&
Prof. D.N. Srivastava,
Deptt. of Psychology
Agra College,
Agra.
 9. Publisher : Agra Psychological
Research Cell,
Tiwarí Kothí,
Belianganj,
Agra.

- 21
1. Name of Test : EDUCATIONAL INTEREST RECO
(NTL - 334)
 2. (a) Language of test : Hindi
(b) Language of manual : English
 3. Format of test, such as reusable Test book-
let separate answer sheets etc. : Consumable
 4. Time for administration : There is no time
limit for this record
 5. Number of forms available : Ordinarily individual
takes about 10 to 15
minutes time to
complete.
 6. Date of publication and of revision
(if any) : 1975
 7. Price : Rs.1/- per specimen
set
 8. Author's name & position : V. P. Bansal,
Govt. College of Edu.
Bhivani
&
Prof. D. N. Srivastava,
Deptt. of Psychology
Agra College,
Agra.
 9. Publisher : Agra Psychological
Research Cell,
Tiwari Kothi,
Balanganj,
Agra.

The Educational Interest Record has been developed for school and college students. The suitability of the educational subjects and activity for inclusion in this test has been judged by 20 judges and the Educational Interest Record (EIR) consists of 128 educational subjects and activities of different faculties. These are distributed in eight educational fields, viz., science, Engineering, Medical, Agriculture, Humanities and Arts, Home Science, fine arts and Commers. Each of these subjects have been appropriately paired with the other.

It is a self-administering test with no time limit but it can be ordinarily completed in 10 to 15 minutes. The instructions are very clear and the scoring is also quite simple and easy. The maximum possible score in any area is 16 and the minimum is 0.

The test retest reliability ranges from .76 to .80 ($r_{.76}$ to $r_{.80}$) and the internal consistency reliability as determined by the split half method range from .74 to .86. Which are fairly high.

The validity of this test has been determined

by correlating its score with the teachers ratings and these correlations for different subjects range from .58 to .76. No other criterion for its validation has been used and this tantamounts to a limit to its validity. It could have been validated by using some other measures also.

Separate norms for high school, intermediate and under graduates boys and girls have been provided in Stanine Grades. The educational interests of subjects can also be presented on an educational interest profile. The sample on which the norms for high school boys and girls, intermediate boys and girls is based is rather small. But the test appears to be useful but for its limited validity.

Revised by *

Dr. E. K. Januar,
Reader,
Dept. of Psychology
Patna University
Patna - 800005.

- (1) 1. Name of Test : TEACHER EFFECTIVE SCA
(NTL - 396)
2. (a) Language of test : Hindi
(b) Language of manual : English
3. Format of Test, such as reusable test booklet, separate answer sheets etc. : Consumable
4. Time for administration : No time
5. Number of forms available : One
6. Date of Publication and of revision (if any) : 4.1.1979
7. Price : --
8. Author's name & position : Dr. Pramod Kumar,
Psychology Deptt.
Jodhpur University,
Jodhpur.
&
D. N. Mutha
Jodhpur University,
Jodhpur.
9. Publisher : Agra Psychological
Research Cell,
Belanganj,
Agra - 2820004.
10. Applicability : Secondary teachers

Introduction & Conceptualization:

The authors have provided a clear and well worded definition of teacher effectiveness, with its main characteristics, such as understanding, proper work habits, desirable attitudes, value judgement and adequate personal judgement.

The purpose of the test construction is also clearly mentioned that goodness of an educational programme depends upon quality of teachers available to implement it. This test is aimed to identify the effective teachers among a lot of employed in different school and colleges.

Applicability:

The test is reusable for identifying the effective male and female teachers. But, authors have not mentioned whether the test is reusable for primary/secondary/college or university teachers. It is felt that the scale is relevant for secondary teachers as some of the items are related to teaching practices which are prevalent in schools only and not at university levels. It would have been better if the standard of the teacher to whom this test is applicable been mentioned in the manual.

Item Pool and Test Construction:

The original pool of items consisted of 93 items, collected on the basis of previous studies, expert opinions and teacher opinions. The items were related to teaching effectiveness. It is really good that most of the teaching behaviour categories were included in item pool. Some items were rejected and final form had 60 items. The whole procedure of item analysis and item selection was very well planned. Discriminating power for each item was properly calculated.

Administration and Scoring:

A five point scale is provided for rating each item ranging from strongly agree to disagree with rating values. All items are positively ranging from 5 to 1. The sum of item scores constructs the total scored. The scoring is very simple i.e., unidirectional score.

Population and Sample:

The scale was standardized on a sample of 10 teachers of Jodhpur city. The authors have not mentioned the population from which this sample

was drawn. It would have been much better if the whole sample procedure had been mentioned. What is really a cross section of the population, for which the test is likely to be used by future users?

Distribution of Results:

The authors have given the mean, Median and standard deviations with skewness and Kurtosis indices of the data, which prove that the data are normally distributed.

Reliability & Validity:

The split-half and test-retest reliabilities are very well calculated. The coefficients of reliabilities are very high and indicate that the items are related to the contents of concept to which the test is constructed.

Construct validity has been calculated on the basis of extremen groups as criterion groups. It's value has been calculated for each item finding out the discriminating index. This is a good technique and states that if the scores of the extreme groups differ significantly than the test is valid. This technique becomes the only empirical technique, when no external criterion is available.

The face validity of the test is also very high and every item measures what it purports to measure. Further more, the scale has

been validated with peer ratings and index is very high.

Norms:

The manual of the test has got a table of percentile norms. This is very essential for a good test and a future test user may use the test safely.

It is felt that age norms could also have been worked out as teachers of different ages are supposed to use the test.

References:

Pertinent references are given in the manual.

Summary:

In my opinion the teacher effectiveness scale constructed and standardized by Prasad Kumar and D.N. Mutha is a good, reliable and valid test. It can very safely be used by future researchers and students for their research or academic ventures.

There is a scope to work out the age norms of the test, which will make the test more and effectively usable.

Reviewed by :

Dr. Virendra Mishra
Addl. Director of
Education,
Directorate of
Education U.P.
Allahabad.

- (94) 1. Name of Test : PARENTAL ATTITUDE
RESEARCH INSTRUMENTS
(FATHER)
(NTL - 406)
2. (a) Language of test : Hindi
(b) Language of manual : English
3. Format of Test, such as reusable Test booklet, separate answer sheets etc. : Test sheet with answer printed self administering or reusable as an interview schedule
4. Time for administration : Not indicated
5. Number of forms available : Two - for father and mother separate
6. Date of publication (if any) : April, 1976
7. Price : Not indicated
8. Author's name and position. : Dr. Smt. Uma Saxena
Lecturer,
Mahila Moha Vidyalaya
Kidwai Nagar,
Kanpur.
9. Publisher : Agra Psychological
Research Cell
Tiwari Kothi,
Belanganj,
Agra.

This test is a Hindi version of PARI. The manual does not clearly spell out whether the Hindi Version is based on the original version of Schaefer E.S. and Bell R.Q (1958) or the version of Schulderman-S and Schulderman E. (1970).

The Hindi Version consists of two forms, one for the mother and the other for the father, the former consists of 115 items in 23 scale and the latter with 100 statement following into twenty subscales. The father form is being revised here.

The test as stated in the manual is designed as a tool to study attitude to children among father, both literate and illiterate. In the case of Educated adult, the test can be self-administered and in the case of the latter, with the help of an interview, the test can be used as an individual test or as a group test.

Institutions

The instructions to the respondents are printed on the test sheet itself and in the case of uneducated subjects the instructions are to be given by the test administrator.

Format

The test booklet consists of 200 statements each followed by alternatives A and D indicating different degrees of agreement ranging from complete agreement

to total disagreement with the statement. The 100 items fall in 20 subscales (manual P.4)

Scoring

Scorings are given in terms of 4, 3, 2 and 1, to the responses A & D. The scores on the various items corresponding to each subscale are added, thus arriving at a total score on each subscale. The scores on each subscale are categorized as High (H) (above 3), Medium (M) (between 2 and 3) and Low (L) (below 2) based on the distribution of the scores on each subscale, obtained on a sample of 300 subjects (fathers). The individual is placed in one of the categories. On all the dimensions, a total score is also obtained. The manual makes reference to two scales 'U' and 'R'. The twenty three subscales once again classified into either 'U' or 'R'. Two independent scores are obtainable, one on the 'U' and the other on the 'R' scale by summing up the scores on the various subscales belonging to 'U' or 'R' respectively. It should be observed, however, the manual does not explain anywhere what the 'U' scale is or what the 'R' scale.

Standardization

The PARI (father) form under review according to the manual was standardized on a population of 100 adult men. No details of

the sample of standardization or of the population is given. Basic data regarding means, standard deviation and the distribution of scores have not been presented. This imposes a serious limitation not only on the reviewer but also on the critical user.

Reliability:

The manual reports a retest reliability of 0.77 on a sample of 100 subjects. No indication being given regarding the interval between two administrations. Split-half reliability on a sample of 200 is reported to be 0.79, again no indication being given as to whether the Spearman-Brown correlation has been applied. It is a little surprising that the retest-reliability coefficient and split-half reliability coefficient are so close to each other. It is also not clear whether the samples used for the establishing reliability were independent or were drawn from the 600 subjects used for standardization. Nor it is clear whether the reliability was established before or after standardization.

Validity:

The manual reports a concurrent validity coefficient of 0.81 when the Hindi Version was correlated with the English Version. This is not very acceptable. The revision is of the view that concurrent validity is normally established against an

independent criterion. The author would have done well to attempt some sort of factorial or construct validation.

What has been reported by the author can be interpreted as a measure of reliability (retest or parallel form). The high value of the construct validity coefficient lends support to this view.

Uses:

In the view of the author this instrument is mainly designed for measuring parental attitudes, towards child rearing in a wide variety of areas including personality development, studying personality problems etc. It is not clear whether this claim relates to the original PARI or Hindi Version. If the former is the case, the reviewer would not offer any comment at this point, but if the claims relate to the present Hindi form, then the reviewer would entertain serious reservations. The fact that well constructed original test in English has been found useful else where does not automatically mean that a Hindi Version of the same, not so carefully developed either conceptually, or procedurally can be accepted to be equally useful. In summary the present PARI (Father) test in Hindi

Version is at best a good beginning much more information regarding the process of standardization, item development validation, etc., have to be made available before a clear assessment of its usefulness be made.

Reviewed by :

Dr. E.G. Parameshwaran
Prof. & Head,
Deptt. of Psychology
Osmania University
Hyderabad.

the sample of standardization or of the population is given. Basic data regarding means, standard deviation and the distribution of scores have not been presented. This imposes a serious limitation not only on the reviewer but also on the critical user.

Reliability:

The manual reports a retest reliability of 0.77 on a sample of 100 subjects. No indication being given regarding the interval between two administrations. Split-half reliability on a sample of 200 is reported to be 0.79, again no indication being given as to whether the Spearman-Brown correlation has been applied. It is a little surprising that the retest-reliability coefficient and split-half reliability coefficient are so close to each other. It is also not clear whether the samples used for the establishing reliability were independent or were drawn from the 600 subjects used for standardization. Nor it is clear whether the reliability was established before or after standardization.

Validity:

The manual reports a concurrent validity coefficient of 0.81 when the Hindi Version was correlated with the English Version. This is not very acceptable. The revision is of the view that concurrent validity is normally established against an

independent criterion. The author would have done well to attempt some sort of factorial or construct validation.

What has been reported by the author can be interpreted as a measure of reliability (retest or parallel form). The high value of the construct validity coefficient lends support to this view.

Uses:

In the view of the author this instrument is mainly designed for measuring parental attitudes, towards child rearing in a wide variety of areas including personality development, studying personality problems etc. It is not clear whether this claim relates to the original PARI or Hindi Version. If the former is the case, the reviewer would not offer any comment at this point, but if the claims relate to the present Hindi form, then the reviewer would entertain serious reservations. The fact that well constructed original test in English has been found useful else where does not automatically mean that a Hindi Version of the same, not so carefully developed either conceptually, or procedurally can be accepted to be equally useful. In summary the present PARI (Father) test in Hindi

Version is at best a good beginning much more information regarding the process of standardization, item development validation, etc., have to be made available before a clear assessment of its usefulness be made.

Reviewed by :

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Introduction

Though this test is an adaptation of the original PARI, as stated in the test booklet, it is not mentioned at all in the manual under introduction to the test. One would have liked this information particularly when it is stated that the present Hindi version of PARI but it is not clear as to whose test has been adapted for his purpose. One would have also liked to know whether it is simply a Hindi version of the original scale or an adaptation and if it is the latter, what modifications were made from the original English version of the scale. Though the manual has indicated that the scale is for Father & Mother but the test booklet available was for the Father's form in Hindi.

General Description of the Test, Format and Administration

The Hindi version of the Father's PARI consists of 20 scales with 100 statements and Mother's form, 23 scales with 116 statements. The items depicting each of the 43 scales are given in a tabular form with instructions for scoring procedure. The test could be administered in groups and for illiterate parents through interview

method. The instructions are given in the test booklet. The items are to be answered with a five point scale ranging from strongly agree to strongly disagree but the direction of the scoring is not indicated. This should have been mentioned. The procedure followed to adapt this test in terms of deciding on the suitability of the scale in the Indian context, meaningfulness of items, cultural bias, reformulating the items, assessing the method of answering the items etc. are not given. Therefore one is not sure whether the test is a translated version of an adaptation of the original English version.

Reliability & Validity

The reliability of the scale was established through split-half method for the Father's and Mother's form and reported to be .83. and .79 respectively. 200 each of Fathers and Mothers were used as a sample for this purpose. The test retest reliability for Mothers form, using a sample of 100 mothers is reported to be .78. However, this procedure apparent

1. Name of Test

1. PARENTAL ATTITUDE RESEARCH
INSTRUMENT (NTL-406)

2. (a) Language of
test

: Hindi

(b) Language of
manual

: English

3. Format of Test,
such as reusable
test booklet
separate answer
sheet etc.

: Consumable

4. Time for admini-
stration

: There is no time limit

5. Number of forms
available

: No other form is
available

6. Date of publication
(if any)

: 1976

7. Price

: Rs.18/- per specimen set

8. Author's name &
position

Dr. (Smt.) Uma Saxena
Mahila Mahavidyalaya
Kidwai Nagar.

9. Publisher

Agra Psychological
Research Cell
Tiwari Kothi
Belanganj
Agra - 4.

was not used for the father's form. These measures seem to be adequate for tests of this type. The test has been validated against the English Version of PARI. Since there is no information about the validity of the English version of the scale, it is rather difficult to endorse this procedure. The relationship between English and Hindi version has been reported to be .81 for father's form and .78 for mother's. In this context it would be desirable if details about the validation procedures followed for the English version along with the results had been included in the manual. However, it is required that the adapted version also is validated as per accepted procedure.

Utility:

Though the scale has been administered to 600 mother's and 600 father's, information is available in the manual about the characteristics of the sample and the procedure adopted to draw the sample. For instance, it would have been useful if the geographical spread of this sample, age range, socio-economic groupings, employment status, income range etc. had been given so that the prospective user of the scale would have been benefited.

The norms again are not given but the categorisation has been based on score range into low, middle and high groups for each of the scales both for fathers and mothers is provided. The categorisation has been made using Q1 and Q3 values for the distribution of the score obtained for each of mothers and fathers forms. The interpretation of these categorisation and the score ranges could have been stated in the context of the measured variable.

Applicability:

Since PARI is an instrument for measuring the parental attitudes towards child rearing, it has certainly a larger value in studies on parent-child relationships. It can be used as a Total scale with 20 (Fathers) or 23 (Mothers) sub-scales or any of the sub-scales could be selected for use depending on the objective of any study in this area. The usefulness of this test has not been demonstrated in different areas as delineated by the author and hence it could be helpful if results of any study undertaken by the author on this test could be appended briefly as a support of its applicability. This test appears to have practical value and hence providing more information as indicated might improve its applicability as a research tool.

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